

Application No. 10/573,233

Preliminary Amendment

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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A photopolymer printing plate precursor comprising ~~in this order a support~~, a photosensitive coating and a protective coating ~~on a support, wherein said the~~ photosensitive coating ~~comprises comprising~~ a composition that is photopolymerizable upon absorption of light in the wavelength range from 300 to 450 nm, ~~said the~~ composition comprising a binder, a polymerizable compound, a sensitizer and a photoinitiator, ~~and wherein said and the~~ protective coating ~~comprises comprising~~ one or more types of poly(vinyl alcohol) and optionally poly(vinyl pyrrolidone) in an amount of from 0 to 10 parts by weight of the one or more types of poly(vinyl alcohol), ~~characterized in that wherein~~ said photoinitiator is a hexaaryl-bisimidazole compound, and ~~wherein~~ the mean saponification degree of all the polyvinylalcohols which are used in the protective coating is less than 93 mol-%, ~~and wherein the protective coating may comprise other water-soluble polymers, provided that poly(vinyl pyrrolidone) is only used from 0 to 10 parts by weight of the poly(vinyl alcohol) used.~~

2. (Canceled)

3. (Currently Amended) ~~A~~ The photopolymer printing plate precursor according to claim 1, wherein the binder is a copolymer containing monomeric units of an α,β -unsaturated carboxylic acid and/or an α,β -unsaturated dicarboxylic acid.

4. (Currently Amended) ~~A~~ The photopolymer printing plate precursor according to claim 1, further comprising a polyfunctional (meth)acrylate or alkyl(meth)acrylate compound as a crosslinking agent.

5. (Currently Amended) ~~A~~ The photopolymer printing plate precursor according to claim 1, wherein the polymerizable compound ~~contains comprises~~ one or more of a ~~an~~ urethane, ~~and/or~~ a urea group ~~and/or~~ or a tertiary amino group.

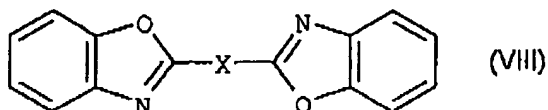
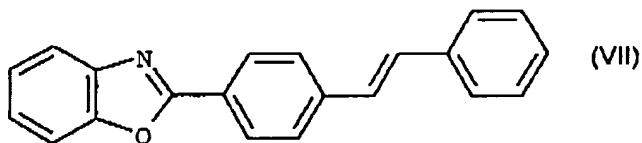
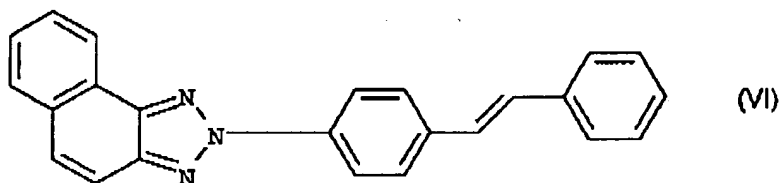
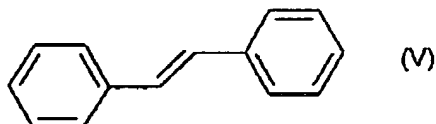
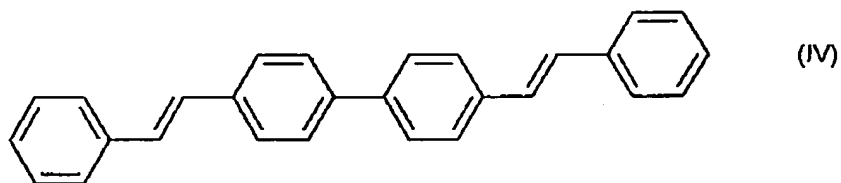
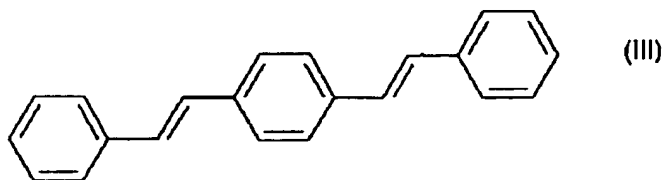
6. (Currently Amended) ~~A~~ The photopolymer printing plate precursor according to claim 1, further comprising a radical chain transfer agent.

7. (Currently Amended) ~~A~~ The photopolymer printing plate precursor according to claim 1, wherein ~~in~~ the sensitizer ~~is comprises~~ an optical brightening agent.

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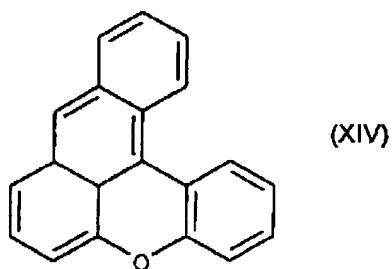
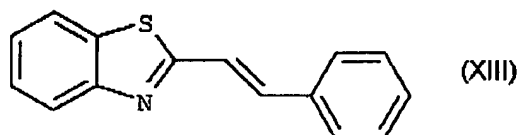
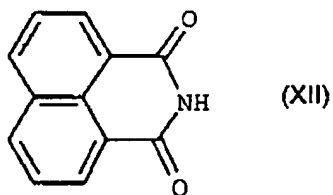
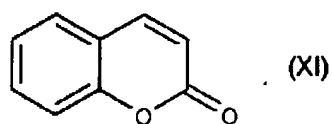
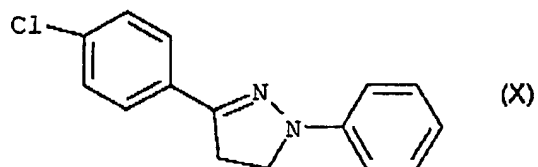
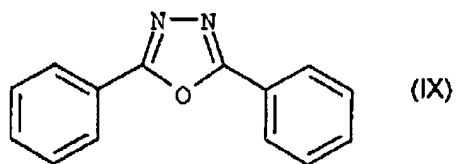
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8. (Currently Amended) A The photopolymer printing plate precursor according to claim 7, wherein the optical brightening agent has a structure according to one of the following formulae:



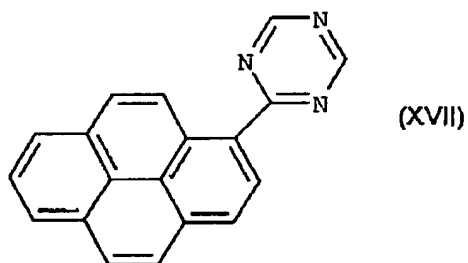
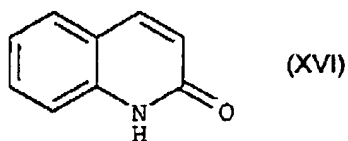
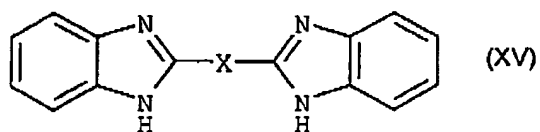
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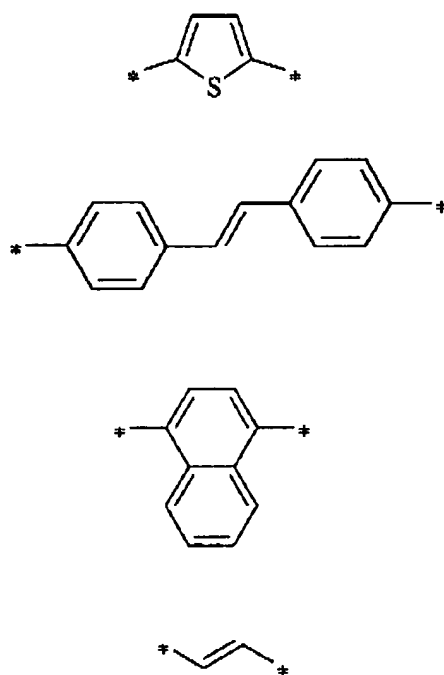
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wherein X is one of the following groups, * denoting the position of attachment in the above formulae:

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and wherein one or more of the nuclei in each of the above formulae (III) to (XVII) may be independently substituted by one or more ~~groups selected from~~ of alkyl, alkoxy, alkylcarbonyl, alkoxy carbonyl, acyloxy, carboxyl, nitrile, amino, hydroxyl, alkylsulfonyl ~~and~~ or aminosulfonyl.

9. (Currently Amended) A method of making a lithographic printing plate comprising the steps of providing a photopolymer printing plate precursor as defined in claim 1, exposing said printing plate precursor with a laser having an emission wavelength in the range from 300 to 450 nm, and processing the printing plate precursor in an aqueous alkaline developer.

10. (Currently Amended) A method of making a lithographic printing plate comprising the steps of providing a photopolymer printing plate precursor as defined in claim ~~8~~ 7, exposing said printing plate precursor with a laser having an emission wavelength in the range from 300 to 450 nm, and processing the printing plate precursor in an aqueous alkaline developer.

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11. (Currently Amended) ~~A~~ The method according to claim 9, wherein the exposure of the lithographic printing plate precursor is carried out at an energy density, measured on the surface of the plate, of $100 \mu\text{J}/\text{cm}^2$ or less.

12. (Currently Amended) ~~A~~ The method according to claim 10, wherein the exposure of the lithographic printing plate precursor is carried out at an energy density, measured on the surface of the plate, of $100 \mu\text{J}/\text{cm}^2$ or less.

13. (New) The photopolymer printing plate precursor according to claim 7, wherein the overall amount of the optical brightening agent ranges from 0.1 to 10% by weight of the photopolymerizable composition.

14. (New) The photopolymer printing plate precursor according to claim 8, wherein the overall amount of the optical brightening agent ranges from 0.1 to 10 % by weight of the photopolymerizable composition.

15. (New) The photopolymer printing plate precursor according to claim 3, further comprising a polyfunctional (meth)acrylate or alkyl(meth)acrylate compound as a crosslinking agent.

16. (New) The photopolymer printing plate precursor according to claim 7, further comprising a polyfunctional (meth)acrylate or alkyl(meth)acrylate compound as a crosslinking agent.

17. (New) The photopolymer printing plate precursor according to claim 8, further comprising a polyfunctional (meth)acrylate or alkyl(meth)acrylate compound as a crosslinking agent.

18. (New) The photopolymer printing plate precursor according to claim 13, further comprising a polyfunctional (meth)acrylate or alkyl(meth)acrylate compound as a crosslinking agent.

19. (New) The photopolymer printing plate precursor according to claim 14, further comprising a polyfunctional (meth)acrylate or alkyl(meth)acrylate compound as a crosslinking agent.

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20. (New) The photopolymer printing plate precursor according to claim 15, wherein the polymerizable compound comprises one or more of a urethane, a urea group or a tertiary amino group.

21. (New) The photopolymer printing plate precursor according to claim 16, wherein the polymerizable compound contains one or more of a urethane, a urea group or a tertiary amino group.

22. (New) The photopolymer printing plate precursor according to claim 17, wherein the polymerizable compound contains one or more of a urethane, a urea group or a tertiary amino group.

23. (New) The photopolymer printing plate precursor according to claim 18, wherein the polymerizable compound contains one or more of a urethane, a urea group or a tertiary amino group.

24. (New) The photopolymer printing plate precursor according to claim 19, wherein the polymerizable compound comprises one or more of a urethane, a urea group or a tertiary amino group.

25. (New) The photopolymer printing plate precursor according to claim 20, further comprising a radical chain transfer agent.

26. (New) The photopolymer printing plate precursor according to claim 21, further comprising a radical chain transfer agent.

27. (New) The photopolymer printing plate precursor according to claim 22, further comprising a radical chain transfer agent.

28. (New) The photopolymer printing plate precursor according to claim 23, further comprising a radical chain transfer agent.

29. (New) The photopolymer printing plate precursor according to claim 24, further comprising a radical chain transfer agent.

30. (New) A method of making a lithographic printing plate comprising the steps of providing a photopolymer printing plate precursor as defined in claim 13, exposing the

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printing plate precursor, and processing the exposed printing plate precursor, wherein the exposure of the lithographic printing plate precursor is carried out at an energy density, measured on the surface of the plate, of $100 \mu\text{J}/\text{cm}^2$ or less.

31. (New) A method of making a lithographic printing plate comprising the steps of providing a photopolymer printing plate precursor as defined in claim 14, exposing the printing plate precursor, and processing the exposed printing plate precursor, wherein the exposure of the lithographic printing plate precursor is carried out at an energy density, measured on the surface of the plate, of $100 \mu\text{J}/\text{cm}^2$ or less.

32. (New) A method of making a lithographic printing plate comprising the steps of providing a photopolymer printing plate precursor as defined in claim 28, exposing the printing plate precursor, and processing the exposed printing plate precursor, wherein the exposure of the lithographic printing plate precursor is carried out at an energy density, measured on the surface of the plate, of $100 \mu\text{J}/\text{cm}^2$ or less.

33. (New) A method of making a lithographic printing plate comprising the steps of providing a photopolymer printing plate precursor as defined in claim 29, exposing the printing plate precursor, and processing the exposed printing plate precursor, wherein the exposure of the lithographic printing plate precursor is carried out at an energy density, measured on the surface of the plate, of $100 \mu\text{J}/\text{cm}^2$ or less.

This listing of claims replaces all prior versions, and listings, of claims in the application.